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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,219	07/23/2001	Juha Rasanen	975.350USW1	4905

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EXAMINER

APPIAH, CHARLES NANA

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,219

Applicant(s)

RASANEN, JUHA

Examiner

Charles N. Appiah

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-37 and 39-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-37 and 39-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 22-45 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 22 is objected to because of the following informalities: It appears "meets" on line 12 of claim 22 should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. Claims 22-37 and 39-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The recitation of the limitation "wherein said request for specific service is received from the network side" in claims 22, 39 and 44 lacks adequate support in applicants' specification as is not clear and adequately disclosed what constitute "the network side". Applicant's specification on page 19, lines 11-19, states "a service request from outside the radio access network in which the mobile station MS is located", however, this does not adequately meets what constitute "specific service is received from the network side" as claimed.

4. Claims 39-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear as to what "said device" as recited on line 5 of claim 39 have prior antecedent basis as it is not clear if said device refers to "a network interworking device" or "a radio transceiver device" and this makes the claim indefinite.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 22-30, 32, 33-37, 39, 40, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tayloe et al. (5,826,188)** in view of **Wong (5,408,419)**.

Regarding claims 22 and 39 Tayloe discloses a method and a network interworking device for interworking between different radio access networks, comprising: a radio transceiver device (multi-mode SU 800) capable of operating with a first radio access network GSM in the 900 MHz frequency range) and a second radio access network TDMA in the 1900 MHz frequency range) – (see col. 11, line 66 to col. 12, line 34), and is attached to the first network (feature of old GW desiring an inter-network handoff, step 302), the method comprising: detecting a service request, wherein the service request is received from the network side (see col. 6, lines 30-48), accessing information on conditions for the first and second radio access networks for giving sufficient support for a service requested by the service request by analyzing

whether or not the first radio access network and the second radio access network meet the conditions (see col. 6, lines 49-66, col. 7, line 44 to col. 8, line 19), and initiating a handover of the radio transceiver device from the first radio access network to the second radio access network if the second radio access network meets the conditions but the first radio access network does not (see col. 8, lines 20-50). See Figs. 3 and 6. Tayloe fails to explicitly teach wherein a specific service is requested.

Wong discloses a system that allows for the efficient transmission of data to and from cellular telephone exchanges through exchange of functional capabilities between the telephone exchanges, which would facilitate the provision of services when one exchange makes a request for specific service (see col. 8, lines 9-32).

It would therefore have been obvious to one of ordinary skill in the art to combine Wong's specific service request based on functional capabilities with Tayloe's system in order to avoid wasting communication resources as taught by Wong.

Regarding claims 23 and 24, Tayloe further discloses wherein the conditions comprise a condition whether the requested service exists in the radio access network, wherein the conditions depend on each other (see col. 8, lines 20-28).

Regarding claim 25, Tayloe further discloses wherein one of the conditions for the first radio access network is a given amount lower than the corresponding condition for the second radio access network (see col. 6, lines 30-48).

Regarding claims 26 and 40, Tayloe further discloses wherein the method is performed in the radio transceiver device (see col. 6, lines 10-29).

Regarding claims 27 and 41, Tayloe further discloses wherein the method is performed in a network control device (see col. 6, lines 30-48).

Regarding claim 28, Tayloe further discloses the step of informing the radio transceiver device of the fact that a handover to the second radio access network is to be initiated (see col. 8, lines 35-40).

Regarding claim 29, Tayloe further discloses the radio transceiver device is a dual mode phone, which is adapted to be operated in the first radio access network and the second radio access network (see col. 7, lines 16-25).

Regarding claim 30, Tayloe further discloses wherein either the first or the second radio access network is a GSM network second (see col. 7, lines 8-25).

Regarding 32, Tayloe further discloses the capability of handing off between networks having differing air standards such as CDMA, TDMA and GSM modulation schemes (see col. 3, lines 49-67, col. 7, lines 9-25), that communications can be carried with conventional telephone and other communications devices such as RF telephones and pagers (see col. 4, lines 58-65), suggesting circuit –switched services capability as specific service request.

Regarding claim 33, the combination of Tayloe, and Wong further teach as taught by Wong wherein the requested specific service is a packet service (see col. 4, lines 20-28).

Regarding claims 34 and 35 Tayloe further discloses wherein an error procedure is initiated, when it is detected in the analyzing step that the requested

specific service is not available in any of the networks and wherein the error procedure is a notification of the user (see col. 8, lines 20-28).

Regarding claims 36 and 37 Tayloe further discloses wherein the radio transceiver device is attached to the first radio access network such that it is located in a cell of the first radio access network by air with the first radio access network and the radio transceiver is also located in the cell of the second radio access network (see col. 3, line 55 to col. 4, line 22).

Regarding claim 42, Tayloe further discloses wherein the analyzing means is connected to a database for obtaining information regarding the conditions of the requested service (see col. 7, lines 26-43, col. 11, lines 16-25).

Claim 44, which recites a computer program embodied on a computer readable medium, that controls interworking between different radio access networks is rejected for the same reasons as set forth in the rejection of claims 22 and 39 above.

4. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Tayloe et al and Wong** as applied to claim 22 above, and further in view of **Popovic (6,393,047)**.

Regarding claim 31, Tayloe further discloses the capability of handing off between networks having differing air standards such as CDMA, TDMA and GSM modulation schemes (see col. 3, lines 49-67, col. 7, lines 9-25) that communications can be carried with conventional telephone and other communications devices such as RF telephones and pagers (see col. 4, lines 58-65), suggesting circuit-switched services

capability, but the combination of Tayloe and Wong fail to specifically teach wherein either the second or the first radio access network is a UMTS network.

Popovic discloses a communication system in the context of a universal mobile telecommunications system (UMTS), which is capable of both circuit-switched services and packet-switched services over a radio access network wherein the radio access network is WCDMA system in which individual radio channels are allocated using CDMA spreading codes with WCDMA providing wide bandwidth for multimedia services and other high rate demands as well as (see col. 4, lines 32-67).

It would therefore have been obvious to one of ordinary skill in the art to implement system of Tayloe and Wong including handing off calls between different radiotelephone networks whereby one of the networks is a UMTS network capable of providing both circuit-switched and packet-switched services such as multimedia and other high rate demands as taught by Popovic.

7. Claims 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Tayloe et al. (5,826,188)** in view of Wong (5,408,419) and further in view of **Chambers (6,256,497)**.

Tayloe as modified by Wong fail to explicitly teach wherein the analyzing means is configured to analyze whether a subscriber using the radio transceiver is entitled to use the requested service.

In an analogous field of endeavor, Chambers discloses a mobile telephone which is configured for dual-mode communication using an apparatus for interworking between first and second telecommunication networks, in which the first network

provides a first telecommunication service and the second network provides a second telecommunications service (see col. 2, lines 41-51). According to Chambers in response to a request, means are provided for determining from interworking data whether particular subscribers are permitted to use the second service provided by the second network (see col. 3, lines 4-14 and col. 9, lines 45-67). Chambers teaches that having access to different networks such as a satellite network allows subscribers such as roaming subscribers who move beyond coverage areas of their home PLMN to make use of unique services provided by the satellite network (see col. 2, lines 12-39).

It would therefore have been obvious to one of ordinary skill in the art to provide the interworking between different networks to provide services to subscribers of Chambers to Tayloe as modified by Wong in order to provide optional wide range services to subscribers irrespective of location.

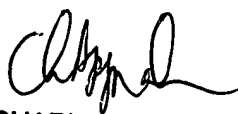
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Appiah whose telephone number is 571 272-7904. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CA


CHARLES APPIAH
PRIMARY EXAMINER